UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/410,511	09/30/1999	DARRELL SHIVELY	CISCO-1372	6966

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EXAMINER
BLAIR, DOUGLAS B

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 October 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-50* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-50* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1.   Claims 1-50 are currently pending in this application.

Claim Objections

2.   Claim 46 objected to because of the following informalities: the verb tense on log should

be past in the sixth line of the claim ("..with a user log in through the corresponding port;"

should be with a user logged in through the corresponding port;"). Appropriate correction is

required.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-18 and 29-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S Patent Number 6,412,007 to Bui et al. in view of U.S. Patent Number 6,252,878 to Locklear,

Jr. et al. and U.S. Patent Number 6,006,258 to Kalajan et al..

5.   As to claim 17, Bui teaches a program storage device readable by a machine, tangibly

embodying a program of instructions executable by the machine to perform a method for a max

sessions server of a data communications network keeping a count of the sessions used at a given

time by a group of users (col. 5, lines 66-67 and col. 6, lines 1-11), said method comprising:

assigning unique identification values to each user logged in at a port of a network access server

(col. 11, lines 50-67 and col. 12, lines 1-5); maintaining a master list of unique identification

values associated with logged in users and their respective group identification information

(Figure 8); responding to a new user's attempt to log into the data communications network by

checking to see if the unique identification value of the new user is already in the master list, and

if it is, clearing the entry in the master list and entering the new user's unique identification value

and group identification information in the master list (col. 23, lines 50-63); however Bui does

not explicitly teach a method to compensate for abnormal disconnections or assigning a unique

identification value to each port of an access server.

Locklear teaches a method to correct a count for to compensate for abnormal

disconnections of users belonging to a group (col. 5, lines 59-67 and col. 6, lines 1-4, A

malfunction can be considered an abnormal disconnection.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of Bui regarding a server for keeping track of

sessions with the teachings of Locklear regarding correcting a count to compensate for abnormal

disconnections because correcting for abnormal disconnections allows for more efficient

handling of session information.

Kalajan teaches a method for assigning a unique identifier to each port of a network

access server (col. 5, lines 31-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of the Bui-Locklear combination regarding a

server for keeping track of sessions with the teachings of Kalajan regarding assigning a unique

value to a port because keeping track of the port that a user is logged in on ensures proper message delivery to the user (col. 5, lines 31-67).

6.   As to claim 1, it is rejected on the same basis as claim 17 because the method of claim 1 is identical to the method claimed in claim 17.

7.   As to claim 2, Bui teaches a method wherein responding comprises decrementing a counter associated with a group associated with the unique identification value of the cleared entry; and incrementing a counter associated with a group associated with the unique identification value of the new user (col. 12, lines 60-67 and col. 13, lines 1-3).

8.   As to claim 3, Bui teaches a method comprising rejecting a new user's attempt to log in to the data communications network if the log in would cause a counter associated with a group to which the new user belongs to exceed a predetermined number of maximum sessions (col. 22, lines 12-54).

9.   As to claim 4, it has the same limitation as claim 3 and is rejected on the same basis as claim 3.

10.   As to claim 5, Bui teaches a method comprising allowing a new user's attempt to log into the data communications network if the log in would not cause a counter associated with a group to which the new user belongs to exceed a predetermined number of maximum sessions (col. 22, lines 12-54).

11.   As to claim 6, it has the same limitations as claim 5 and is thus rejected on the same basis as claim 5.

12.   As to claim 7, Bui teaches a method wherein assigning identifications includes forming a unique identification value from port identification associated with the port and from network

access server identification associated with the network access server (col. 12, lines 60-67 and

col. 13, lines 1-3).

13.   As to claims 8-12, they have same limitation as claim 7 and are thus rejected on the same

basis as claim 7.

14.   As to claim 13, it is rejected on the same basis as claim 17 because the method of claim

13 is identical to the method claimed in claim 17 and server sessions can be considered a

resource.

15.   As to claim 14, it has the same limitation as claim 2 and is thus rejected on the same basis

as claim 2.

16.   As to claims 15 and 16, they have the same limitation as claim 7 and are thus rejected on

the same basis as claim 7.

17.   As to claim 18, it is rejected on the same basis as claim 17 because claim 17 has narrower

limitations than claim 18 (Sessions by the user can be considered a resource.).

18.   As to claim 29, Bui teaches a system for a max sessions server keeping a count of the

sessions used at a given time by a group of users (col. 5, lines 66-67 and col. 6, lines 1-11), said

system comprising: a max session server (col. 11, lines 50-67 and col. 12, lines 1-5); database

maintained by the said max sessions server including for each user logged into the data

communications system through the max sessions server (col. 18, lines 37-53), the user

belonging to a group (col. 5, lines 66-67 and col. 6, lines 1-11), a unique identification value

associated with the user's connection to the data communications network through a particular

port of a particular network access server for the data communications network (col. 11, lines 50-

67 and col. 12, lines 1-5), and group identification information associated with the user (col. 5,

lines 66-67 and col. 6, lines 1-11); a checker to compare each new log in request directed to the

max sessions server with the contents of said database to determine if a unique identification

value of the new log in request matches an existing unique identification value in the database

(col. 19, lines 24-48); and a clearer to clear existing information in the database associated with

said unique identification value if said checker determines that a unique identification value in

the database is the same as the unique identification of a new log in request (col. 19, lines 60-67

and col. 20, lines 1-6); however Bui does not explicitly teach that the system is for handling

abnormal disconnections or assigning a unique identification value to each port of an access

server.

Locklear teaches a method to correct a count for to compensate for abnormal

disconnections of users belonging to a group (col. 5, lines 59-67 and col. 6, lines 1-4, A

malfunction can be considered an abnormal disconnection.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of Bui regarding a server for keeping track of

sessions with the teachings of Locklear regarding correcting a count to compensate for abnormal

disconnections because correcting for abnormal disconnections allows for more efficient

handling of session information.

Kalajan teaches a method for assigning a unique identifier to each port of a network

access server (col. 5, lines 31-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of the Bui-Locklear combination regarding a

server for keeping track of sessions with the teachings of Kalajan regarding assigning a unique

value to a port because keeping track of the port that a user is logged in on ensures proper

message delivery to the user (col. 5, lines 31-67).

19.   As to claim 30, Bui teaches a system comprising a counter keeping a count of sessions

used by a group of users (col. 12, lines 60-67 and col. 13, lines 1-3).

20.   As to claim 31, Bui teaches a system comprising an incrementer incrementing a counter

for each new log in by a member of a group of users (col. 12, lines 60-67 and col. 13, lines 1-3).

21.   As to claim 32, Bui teaches a system comprising a decrementer decrementing a counter

for each disconnection of a member of a group of users (col. 12, lines 60-67 and col. 13, lines 1-

3).

22.   As to claim 33, Bui teaches a system comprising rejecting a new user's attempt to log in

to the data communications network if the log in would cause a counter associated with a group

to which the new user belongs to exceed a predetermined number of maximum sessions (col. 22,

lines 12-67).

23.   As to claim 34, Locklear teaches a system comprising a network access server checker

checking a network access server associated with a maximum sessions server to determine if it

has become non-operational (col. 13, lines 18-28); and a broken network access clearer clearing

existing information in the database associated with a network access server if said network

access server checker determines said network access server to be non-operational (col. 5, lines

59-67 and col. 6, lines 1-4).

24.   As to claim 35, Bui teaches a system comprising a transmitter transmitting a

communication to another maximum sessions server on the data communications network to

inform it of the non-operational status of a network access server (col. 25, lines 60-67 and col. 26, lines 1-8).

25.   As to claim 36, Locklear teaches a system comprising a receiver receiving communications over the data communications network informing of a non-operational network access server (col. 5, lines 59-67 and col. 6, lines 1-4).

26.   As to claim 37, Locklear teaches a system comprising a broken network access server clearer clearing existing information in the database associated with a network access server if said receiver is informed of the non-operational status of said network access server (col. 5, lines 59-67 and col. 6, lines 1-4).

27.   As to claim 38, it is rejected on the same basis as claim 29 because claim 29 has narrower limitations than claim 38 (Sessions by the user can be considered a resource.).

28.   As to claims 39-41, they have the same limitations as claims 30-32, respectively, and are thus rejected on the same basis as claims 30-32.

29.   As to claims 42-45, they have the same limitations as claims 34-37, respectively, and are thus rejected on the same basis as claims 34-37.

30.   Claims 19-28 and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,412,007 to Bui et al. in view of U.S. Patent Number 6,252,878 to Locklear, Jr. et al., U.S. Patent Number 6,151,688 to Wipfel et al. and U.S. Patent Number 6,006,258 to Kalajan et al..

31.   As to claim 27, Bui teaches a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for a sessions server of a data communications network keeping a count of the sessions used at a given

time by a group of users (col. 5, lines 66-67 and col. 6, lines 1-11), said method comprising:

assigning unique identifications values to each user logged in at a port of a network access server

(col. 11, lines 50-67 and col. 12, lines 1-5); maintaining a master list of unique identification

values associated with logged in users and their respective group identification information

(Figure 8); however Bui does not explicitly teach a method to compensate for abnormal

disconnections, periodically checking access servers and removing identifications on non-

operational servers from the master list, or assigning a unique identification to a port number.

Locklear teaches a method to correct a count for to compensate for abnormal

disconnections of users belonging to a group; responding to the non-operational status of a

network access server by removing all unique identification values associated with the non-

operational network access server from said master list and decrementing the count of the

sessions used by the number of unique identification values removed from a master list (col. 5,

lines 59-67 and col. 6, lines 1-4, A malfunction can be considered an abnormal disconnection.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of Bui regarding a server for keeping track of

sessions with the teachings of Locklear regarding correcting a count to compensate for abnormal

disconnections because correcting for abnormal disconnections allows for more efficient

handling of session information.

Wipfel teaches a method of periodically checking a network access server to determine if

it has become non-operational (col. 10, lines 35-60).

It would have been further obvious to one of ordinary skill in the Computer Networking

art at the time of the invention to combine the teachings of Wipfel regarding periodically

checking access servers with the teachings of the Locklear-Bui combination regarding a system

for regulating system usage because periodically checking network resources increases the

ability of the network to adapt to malfunctions.

Kalajan teaches a method for assigning a unique identifier to each port of a network

access server (col. 5, lines 31-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of the Bui-Locklear-Wipfel combination

regarding a server for keeping track of sessions with the teachings of Kalajan regarding assigning

a unique value to a port because keeping track of the port that a user is logged in on ensures

proper message delivery to the user (col. 5, lines 31-67).

32.   As to claim 19, it is rejected on the same basis as claim 27 because the method of claim

19 is identical to the method claimed in claim 27.

33.   As to claim 20, Wipfel teaches a method wherein periodically checking is performed by

an authentication, authorization and accounting server associated with a maximum session server

(col. 10, lines 35-60).

34.   As to claim 21, Bui teaches a method comprising transmitting a communication to

another maximum sessions server on the data communications network to inform it of the non-

operational status of a network access server (col. 25, lines 60-67 and col. 26, lines 1-21).

35.   As to claim 22, Locklear teaches a method comprising receiving a communication from

another maximum sessions server (col. 5, lines 59-67 and col. 6, lines 1-4).

36.   As to claims 23-26, they have similar limitations to claims 19-22 respectively and are

thus rejected on the same basis as claims 19-22.

37.   As to claim 28, it is rejected on the same basis as claim 27 because claim 27 has narrower

limitations than claim 28 (Sessions by the user can be considered a resource.).

38.   As to claim 46, Bui teaches a method comprising: maintaining a master list of unique

identification numbers associated with each logged in user (Figure 8); responding to a user's

attempt to log into the data communications network by checking to see if the unique

identification number associated with the user is already on the master list (col. 23, lines 50-63);

removing the unique identification number from the master list if said unique identification

number already appears on the list; decrementing the corresponding maximum sessions counters

by one of said unique identification number is already on the master list (col. 23, lines 50-63);

and decrementing a max sessions counter based on lost connections (col. 11, lines 24-49);

however Bui does not explicitly teach periodically checking access servers and removing list

entries of deactivated servers or assigning unique values to ports.

Locklear teaches a method of removing all unique identification numbers associated with

a network access server form the master list if the network access fails to communicate within a

time limit (col. 5, lines 59-67 and col. 6, lines 1-4).

It would have been obvious to one of ordinary skill in the Computer Networking art at the

time of the invention to combine the teachings of Locklear regarding correcting a count to

compensate for abnormal disconnections including those of non-operational network access

server with the teachings of Bui regarding a server for keeping track of sessions because both

inventions deal with systems for regulating user sessions.

Wipfel teaches a method of having a server automatically check on a periodic time basis to determine if a network access server has failed to communicate, the server notifying a session server if the network access server fails to communicate (col. 10, lines 35-60).

It would have been further obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Wipfel regarding periodically checking access servers with the teachings of the Locklear-Bui combination regarding a system for regulating system usage because periodically checking network resources increases the ability of the network to adapt to malfunctions.

Kalajan teaches a method for assigning a unique identifier to each port of a network access server (col. 5, lines 31-67).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Bui-Locklear-Wipfel combination regarding a server for keeping track of sessions with the teachings of Kalajan regarding assigning a unique value to a port because keeping track of the port that a user is logged in on ensures proper message delivery to the user (col. 5, lines 31-67).

39.   As to claim 47, Bui teaches a method comprising broadcasting a network access server failure to all maximum session servers associated with a network access server (col. 25, lines 60-67 and col. 26, lines 1-21).

40.   As to claim 48, Bui teaches a method comprising rejecting a new user's attempt to log in to the data communications network if the log in would cause a counter associated with a group to which the new user belongs to exceed a predetermined number of maximum sessions (col. 22, lines 12-67).

41.   As to claim 49, Bui teaches a method comprising allowing a new user's attempt to log

into the data communications network if the log in would not cause a counter associated with a

group to which the new user belongs to exceed a predetermined number of maximum sessions

allowed by the maximum sessions server for the user or the group to which the user belongs;

incrementing the corresponding counters of number logged in sessions by one; and adding the

unique identification number to the master list (col. 22, lines 12-67).

42.   As to claim 50, Kalajan teaches a method wherein the unique identification numbers are

formed by concatenation of a network access server identifier and a port identifier (col. 11, lines

50-67 and col. 12, lines 1-5).

Response to Arguments

43.   Applicant's arguments with respect to claims 1-50 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

44.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The

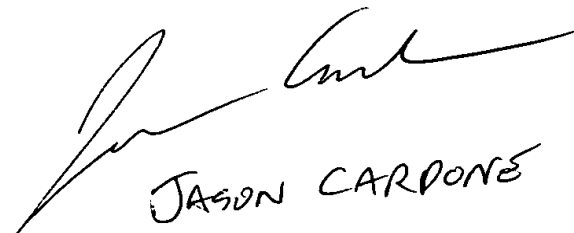examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9306 for regular

communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3800.

Douglas Blair
December 28, 2003.

JASON CARDONE
AU: 2142